Remarks

In response to the Office Action mailed January 3, 2008 applicant submits the foregoing amendments and following comments.

The present invention relates to the stabilization of trans-1,2-dichloroethylene (TDCE) for the purpose of its use in the treatment of solid surfaces. The stabilized solution comprises trans-1,2-dichloroethylene and as stabilizing additives a combination of butylene oxide, diisobutylene, isoprene, acetone and diethylamine. More particularly, the stabilizing additives comprises from 200 ppm to 800 ppm, preferably 530 ppm, of butylene oxide, from 50 to 500 ppm, preferably 200 ppm, of diisobutylene, from 50 to 200 ppm, preferably 100 ppm, of isoprene, from 10 to 100 ppm, preferably 50 ppm, of acetone and from 10 to 50 ppm, preferably 10 ppm, of diethylamine.

1,2-Dichloroethylene is an industrial solvent widely used for the treatment of solid surfaces, for example for cleaning solid surfaces, degreasing metal components or defluxing printed circuits. Under the conditions of us, the TDCE is subjected to various reactions, such as oxidation by the air, hydrolysis by the water, thermal decomposition or catalytic reactions on contact with the metals. These reactions decrease the efficacy of TCDE as a solvent. The present inventors discovered a combination of stabilizing additive for use with TDCE which provide a complete system for stabilizing with respect to air, water, metals and heat when TDCE is used as a solvent. The claims of the present application have been amended to focus on the specific combination of stabilizing additives discovered by the present inventors.

Claims 1-7, 9-12 and 14-19 were rejected under 35 USC 102(b) as being anticipated by Doyel et al. (US 7,288,511). Applicants submit the Doyel et al. '511 fails to anticipate the claims of the application as presently amended.

Doyel et al. '511 discloses a cleaning combination which must include dichloroethylene and an alkoxy-substituted perfluoro compound containing six or more carbons. The cleaning combination of Doyel et al. '511 may also include enhancement agents selected from a multitude of listed materials. Applicants submit the Doyel et al. '511 fails to disclose a

combination of enhancements that includes diisobutylene. Furthermore, applicants submit that the disclosure of Doyle et al. '511 of a multitude of enhancement agents fails to disclose the specific combinations of stabilizers of the present invention which provide stability to TDCE with respect to air, water, metals and heat when TDCE is used as a solvent. Applicants submit that Doyel et al. '511 fails to anticipate the invention as presently claimed and the rejection should be withdrawn.

Claims 1-7 and 9-19 were rejected under 35 USC 102(b) as being anticipated by Hanada et al. (US 7,163,645). Applicants submit the Hanada et al. '645 fails to anticipate the claims of the application as presently amended.

Hanada et al. '645 discloses a solvent composition that comprises 1,1,2,2-tetrafluoroethyl-2,2,2-trifluoroethyl ether (R347), tran-1,2-dichloroethylene and a C1-3 alcohol. The solvent of Hanada et al. '645 can also include other compounds. Hanada et al. '645 discloses a long list of materials from which the other compounds can be selected. The extensive list of other compounds of Hanada et al. '645 does not include butylene oxide or isoprene or diisobutylene. Furthermore, applicants submit that the disclosure of Hanada et al. '645 of a long list of materials fails to disclose the specific stabilizer combination of the present invention which provide stability to TDCE with respect to air, water, metals and heat when TDCE is used as a solvent. Applicants submit that Hanada et al. '645 fails to anticipate the specific combination of the present invention as currently claimed and the rejection should be withdrawn.

Claims 1-19 were rejected under 35 USC 102(b) as being anticipated by Samejima et al. (US 5,607,912). Applicants submit the Samejima et al. '912 fails to anticipate the claims of the application as presently amended.

Samejima et al. '912 discloses an azeotropic or azetropic-like mixture comprising a hydrochlorofluoropropane and at least one of halogentaed hydrocarbon having a boiling point of from 20° to 85°C and hydrocarbons having a boiling point of from 20° to 85°C and alcohols having 1 to 4 carbon atoms. Samejima et al. '912 discloses numerous additional components which may be included in the mixture. Applicants submit that Samejima et al. '912 fails to include any disclosure of a combination which includes diisobutylene or

isoprene. Furthermore, applicants submit that the disclosure of Samejima et al. '912 of additional components fails to disclose the specific stabilizer combination of the present invention which provide stability to TDCE with respect to air, water, metals and heat when TDCE is used as a solvent. Applicants submit that Samejima et al. '912 fails to anticipate the specific combination of the present invention as currently claimed and the rejection should be withdrawn.

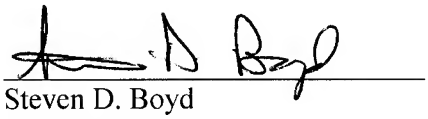
Claims 1-7 and 9-19 were rejected under 35 USC 102(b) as being anticipated by Beaver et al. (US 6,133,221). Applicants submit the Beaver et al. '221 fails to anticipate the claims of the application as presently amended.

Beaver et al. '221 discloses a cleaning process which employs a cleaning solvent which comprises a fluorinated hydrobromocarbon and stabilizer compounds. Beaver et al. 221 discloses numerous stabilizer compounds. Applicants submit that Beaver et al. '221 fails to disclose the use of diisobutylene or isoprene or diethylamine as stabilizer compounds, let alone the use of all of these materials as part of a specific combination. Furthermore, applicant submit that the disclosure of Beaver et al.'221 of numerous stabilizer compounds fails to disclose the specific stabilizer combination of the present invention which provides stability to TDCE with respect to air, water, metals and heat when TDCE is used as a solvent. Applicants submit that Beaver et al. '221 fails to anticipate the specific combination of the present invention as currently claimed and the rejection should be withdrawn.

Applicants submit that in view of the foregoing amendment and remarks, claims 1, 2, 3 and 19, are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

Date: April 29, 2008



Steven D. Boyd
Reg. No. 31,000
Arkema Inc.
Attorney for Applicant
Phone: (215) 419-5270
Customer Number 31684